

Serial Number:

09/844,864

ENTERED

CRF Processing Date:

5/11/2001

Edited by:

Verified by:

[Signature]

(STIC staff)

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/844,864

DATE: 05/23/2001

TIME: 13:11:58

Input Set : A:\Pto.amc

Output Set: C:\CRF3\05232001\I844864.raw

A 2

2 <110> APPLICANT: Matzuk, Martin
 4 Ren, Yongsheng
 6 Wu, Xuemei
 10 <120> TITLE OF INVENTION: OVARY SPECIFIC GENES AND PROTEINS
 14 <130> FILE REFERENCE: P01925US2 / 09807797 / OTA 99-48
 C--> 18 <140> CURRENT APPLICATION NUMBER: US/09/844,864
 20 <141> CURRENT FILING DATE: 2001-04-27
 24 <150> PRIOR APPLICATION NUMBER: 60/106,020
 26 <151> PRIOR FILING DATE: 1998-10-28
 30 <150> PRIOR APPLICATION NUMBER: PCT/US99/25209
 32 <151> PRIOR FILING DATE: 1999-10-28
 36 <160> NUMBER OF SEQ ID NOS: 25
 40 <170> SOFTWARE: PatentIn version 3.0
 44 <210> SEQ ID NO: 1
 46 <211> LENGTH: 1277
 48 <212> TYPE: DNA
 50 <213> ORGANISM: Mus musculus
 54 <400> SEQUENCE: 1

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59	cgacccgcgc	ccccctcctt	cctccccggc	tacagacagc	tcattggccgc	180
61	gacagccacc	agcgggcaca	gctcatggcc	ctgctgtcgc	ggatgggtcc	240
63	agcagccgtg	acgtgtcggt	gcaggtgaac	ccgcgcgcgc	acgcctcggg	300
65	ctcgggcgc	gcacgctgca	gcctgcagg	tgccgagcca	gccccgacgc	360
67	tcctgtcaac	cccgtggcca	cgccggcgcc	gggagatccc	cgcgatcctg	420
69	gccccgttct	cgctccgtgac	cttctgtggc	ctctcctcct	caactggagg	480
71	aggcagacac	ccacgaagg	agaggggagc	ccggcatcct	cggggacccg	540
73	ccgagagagg	tggccgcgag	gaaagcggtc	ccccagccgc	gaagcgagga	600
75	caggctgcag	ggcaggcccg	gtgggagcag	cagccaccac	cggaggaccg	660
77	gcggcgatgc	agtctgagcc	tgggagcgag	gagccatgtc	ctgccgcaga	720
79	gaccccggtg	attcgggatg	ccctcgagac	caggcctccc	cgaaaagcac	780
81	aaggagcgcc	tgcgtttcca	gttcttagag	cagaagtacg	gctactatca	840
83	tgcaaaatcc	ggtgggagag	cgccatgtg	tgggtgtgtg	agggcaccag	900
85	cttcaaacag	ttctgcccag	tgtgtgagaa	atcctacaac	ccttacagag	960
87	cacctgtcaa	agttgtaaaa	gaactagatg	tgccctgcca	gtcagatttc	1020
89	ccctaaacgc	ccccatcggc	aagacttgtg	tgggagatgc	aaggacaaac	1080
91	cgacagcacc	ttcagcttca	aatacatcat	ttagtgagag	tcgaaaacgt	1140
93	tggggcta	ggaatggaca	agtgtgcttt	ctccccctct	cacctcttcc	1200
95	tcttcatgac	agacagtgtt	acttggatat	aaagcctgtg	aataaaaagg	1260
97	aaaaaaaaaa	aaaaaaaa			attgcaaaca	1277

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 104 <212> TYPE: PRT
 106 <213> ORGANISM: Mus musculus
 110 <400> SEQUENCE: 2

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113	1				5					10					15	

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115 Ala Thr Lys Ala Gly Asp Gly Trp Arg Phe Gly Ala Arg Gly Cys Arg
116                20                25                30
118 Pro Ala Pro Pro Ser Phe Leu Pro Gly Tyr Arg Gln Leu Met Ala Ala
119                35                40                45
121 Glu Tyr Val Asp Ser His Gln Arg Ala Gln Leu Met Ala Leu Leu Ser
122                50                55                60
124 Arg Met Gly Pro Arg Ser Val Ser Ser Arg Asp Ala Ala Val Gln Val
125 65                70                75                80
127 Asn Pro Arg Arg Asp Ala Ser Val Gln Cys Ser Leu Gly Arg Arg Thr
128                85                90                95
130 Leu Gln Pro Ala Gly Cys Arg Ala Ser Pro Asp Ala Arg Ser Gly Ser
131                100               105               110
133 Cys Gln Pro Arg Gly His Ala Gly Ala Gly Arg Ser Pro Arg Ser Trp
134                115               120               125
136 Gln Thr Val Ala Pro Phe Ser Ser Val Thr Phe Cys Gly Leu Ser Ser
137                130               135               140
139 Ser Leu Glu Val Ala Gly Gly Arg Gln Thr Pro Thr Lys Gly Glu Gly
140 145               150               155               160
142 Ser Pro Ala Ser Ser Gly Thr Arg Glu Pro Glu Pro Arg Glu Val Ala
143                165               170               175
145 Ala Arg Lys Ala Val Pro Gln Pro Arg Ser Glu Glu Gly Asp Val Gln
146                180               185               190
148 Ala Ala Gly Gln Ala Gly Trp Glu Gln Gln Pro Pro Pro Glu Asp Arg
149                195               200               205
151 Asn Ser Val Ala Ala Met Gln Ser Glu Pro Gly Ser Glu Glu Pro Cys
152                210               215               220
154 Pro Ala Ala Glu Met Ala Gln Asp Pro Gly Asp Ser Asp Ala Pro Arg
155 225               230               235               240
157 Asp Gln Ala Ser Pro Gln Ser Thr Glu Gln Asp Lys Glu Arg Leu Arg
158                245               250               255
160 Phe Gln Phe Leu Glu Gln Lys Tyr Gly Tyr Tyr His Cys Lys Asp Cys
161                260               265               270
163 Lys Ile Arg Trp Glu Ser Ala Tyr Val Trp Cys Val Gln Gly Thr Ser
164                275               280               285
166 Lys Val Tyr Phe Lys Gln Phe Cys Arg Val Cys Glu Lys Ser Tyr Asn
167                290               295               300
169 Pro Tyr Arg Val Glu Asp Ile Thr Cys Gln Ser Cys Lys Arg Thr Arg
170 305               310               315               320
172 Cys Ala Cys Pro Val Arg Phe Arg His Val Asp Pro Lys Arg Pro His
173                325               330               335
175 Arg Gln Asp Leu Cys Gly Arg Cys Lys Asp Lys Arg Leu Ser Cys Asp
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179                355               360
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185 <212> TYPE: DNA
187 <213> ORGANISM: Mus musculus
191 <400> SEQUENCE: 3

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Output Set: C:\CRF3\05232001\I844864.raw

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192 gtcacagctt tccccgtccc gaatatggtg atctgtctcc attgtccaga tcaggatgat      60
194 tctttagaag aagtcacaga ggaatgctat tccccaccca ccctccagaa cctggcaatt    120
196 cagagtctac tgagggatga ggccctggcc atttctgctc tcacggacct gccccagagt    180
198 ctgttccag taatttttga ggaggccttc actgatggat atatagggat cttgaaggcc    240
200 atgatacctg tgtggccctt cccatacctt tctttaggaa agcagataaa taattgcaac    300
202 ctggagactt tgaaggctat gcttgaggga ctagatatac tgcttgaca aaaggttcaa    360
204 accagtaggt gcaaactcag agtaattaat tggagagaag atgacttgaa gatatgggct    420
206 ggatcccatg aagggtgaagg cttaccagat ttcaggacag agaagcagcc aattgagaac    480
208 agtgctggct gtgagggtgaa gaaagaattg aagggtgacga ctgaagtcct tcgcatgaag    540
210 ggcagacttg atgaatctac cacatacttg ttgcagtggg cccagcagag aaaagattct    600
212 attcatctat tctgtagaaa gctactaatt gaaggcttaa ccaaagcctc agtgatagaa    660
214 atcttcaaaa ctgtacacgc agactgtata caggagctta tcctaagatg tatctgcata    720
216 gaagagttgg cttttcttaa tccctacctg aaactgatga aaagtctttt cacactcaca    780
218 ctagatcaca tcataggtac cttcagtttg ggtgattctg aaaagcttga tgaggagaca    840
220 atattcagct tgattttctca acttcccaca ctccactgtc tccagaaact ctatgtaaat    900
222 gatgtccctt ttataaaaagg caacctgaaa gaataacctca ggtgcctgaa aaagcccttg    960
224 gagacacttt gcatcagtaa ctgtgacctc tcacagtcag acttggtattg cctgccttat   1020
226 tgcctgaata tttgtgaact caaacatctg catattagtg atatataatt atgtgattta   1080
228 ctcttgagc ctcttggttt tctccttgag agagtggag ataccctgaa aaccctggaa   1140
230 ttggattcat gttgtatagt ggactttcag ttcagtgcct tgctgcctgc cctaagccaa   1200
232 tgttctcacc tcagagaggt cactttctat gataatgatg tttctctgcc tttcttgaaa   1260
234 acaacttcta caccacacag ccctgctgag tcagctgatc tatgagtgtt accctgcccc   1320
236 tctagagtgc tatgatgaca gtggtgtaat actaacacac agattagaaa gtttttgtcc   1380
238 tgagcttctg gatatactga gagccaaaag acagctccat agtgtctcct ttcaaacaac   1440
240 caaatgctct aaatgtgggtg ggtgctacat ttatgatcgg catacccaat gttgccgttt   1500
242 tgtggaacta ctataagctt gattgtgaaa ctgagaaata gaaacttagt attggggact   1560
244 gatgaaatcc taagtgaatg tccactgcta aatggagcat gaaaatgtca atcacctaaa   1620
246 agtctgagat acacaggaaa gtcaataact tcctctgagc tggatgaatg atgttgcatc   1680
248 tgtagaaagt atcaagcact tgtagtttga atgtgttaca atagaagcac cattttatga   1740
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257 <211> LENGTH: 426
259 <212> TYPE: PRT
261 <213> ORGANISM: Mus musculus
265 <400> SEQUENCE: 4
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268 1 5 10 15
270 Val Thr Glu Glu Cys Tyr Ser Pro Pro Thr Leu Gln Asn Leu Ala Ile
271 20 25 30
273 Gln Ser Leu Leu Arg Asp Glu Ala Leu Ala Ile Ser Ala Leu Thr Asp
274 35 40 45
276 Leu Pro Gln Ser Leu Phe Pro Val Ile Phe Glu Glu Ala Phe Thr Asp
277 50 55 60
279 Gly Tyr Ile Gly Ile Leu Lys Ala Met Ile Pro Val Trp Pro Phe Pro
280 65 70 75 80
282 Tyr Leu Ser Leu Gly Lys Gln Ile Asn Asn Cys Asn Leu Glu Thr Leu
283 85 90 95
285 Lys Ala Met Leu Glu Gly Leu Asp Ile Leu Leu Ala Gln Lys Val Gln

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Input Set : A:\Pto.amc

Output Set: C:\CRF3\05232001\I844864.raw

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288 Thr Ser Arg Cys Lys Leu Arg Val Ile Asn Trp Arg Glu Asp Asp Leu
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291 Lys Ile Trp Ala Gly Ser His Glu Gly Glu Gly Leu Pro Asp Phe Arg
292          130          135          140
294 Thr Glu Lys Gln Pro Ile Glu Asn Ser Ala Gly Cys Glu Val Lys Lys
295 145          150          155          160
297 Glu Leu Lys Val Thr Thr Glu Val Leu Arg Met Lys Gly Arg Leu Asp
298          165          170          175
300 Glu Ser Thr Thr Tyr Leu Leu Gln Trp Ala Gln Gln Arg Lys Asp Ser
301          180          185          190
303 Ile His Leu Phe Cys Arg Lys Leu Leu Ile Glu Gly Leu Thr Lys Ala
304          195          200          205
306 Ser Val Ile Glu Ile Phe Lys Thr Val His Ala Asp Cys Ile Gln Glu
307          210          215          220
309 Leu Ile Leu Arg Cys Ile Cys Ile Glu Glu Leu Ala Phe Leu Asn Pro
310 225          230          235          240
312 Tyr Leu Lys Leu Met Lys Ser Leu Phe Thr Leu Thr Leu Asp His Ile
313          245          250          255
315 Ile Gly Thr Phe Ser Leu Gly Asp Ser Glu Lys Leu Asp Glu Glu Thr
316          260          265          270
318 Ile Phe Ser Leu Ile Ser Gln Leu Pro Thr Leu His Cys Leu Gln Lys
319          275          280          285
321 Leu Tyr Val Asn Asp Val Pro Phe Ile Lys Gly Asn Leu Lys Glu Tyr
322          290          295          300
324 Leu Arg Cys Leu Lys Lys Pro Leu Glu Thr Leu Cys Ile Ser Asn Cys
325 305          310          315          320
327 Asp Leu Ser Gln Ser Asp Leu Asp Cys Leu Pro Tyr Cys Leu Asn Ile
328          325          330          335
330 Cys Glu Leu Lys His Leu His Ile Ser Asp Ile Tyr Leu Cys Asp Leu
331          340          345          350
333 Leu Leu Glu Pro Leu Gly Phe Leu Leu Glu Arg Val Gly Asp Thr Leu
334          355          360          365
336 Lys Thr Leu Glu Leu Asp Ser Cys Cys Ile Val Asp Phe Gln Phe Ser
337          370          375          380
339 Ala Leu Leu Pro Ala Leu Ser Gln Cys Ser His Leu Arg Glu Val Thr
340 385          390          395          400
342 Phe Tyr Asp Asn Asp Val Ser Leu Pro Phe Leu Lys Thr Thr Ser Thr
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350 <211> LENGTH: 1018
352 <212> TYPE: DNA
354 <213> ORGANISM: Mus musculus
358 <400> SEQUENCE: 5
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361 aacagctgag ctccaagcaa ggaccagga ccttgacctca ccacagacat aatctttccc      120
363 cacaacacct ccaccaagcc gccctgtaaa tcgacatgag tcgccacagc accagcagcg      180

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DATE: 05/23/2001

PATENT APPLICATION: US/09/844,864

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Output Set: C:\CRF3\05232001\I844864.raw

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365 tgaccgaaac cacagcaaaa aacatgctct ggggtagtga actcaatcag gaaaagcaga      240
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369 tctgcctggg ggagaaagcc aaagaggagg tgaaccgtgt ggaagtcctc tcccaggaag      360
371 gcagaaaacc accaatcact attgctacgc tgaaggcatc agtcctgccc atggctactg      420
373 tgtcaggtat agagctttct cctccagtaa cttttcggct caggactggc tcaggacctg      480
375 tgttcctcag tggcctggaa tgttatgaga cttcggacct gacctgggaa gatgacgagg      540
377 aagaggagga agaggaggag gaagaggatg aagatgagga tgcagatata tcgctagagg      600
379 agatacctgt caaacaagtc aaaaggggtg cttcccagaa gcagatgagc atagcaaaga      660
381 aaaagaaggt ggaaaaagaa gaggatgaaa cagtagtgag gccagccct caggacaaga      720
383 gtccctggaa gaaggagaaa tctacacca gagcaagaa gccagtgacc aagaaatgac      780
385 ctcactcttag catcttctgc gtccaaggca ggatgtccag cagctgtgtt ttggtgcagg      840
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389 ccagccctcc agtttccgga ggtttttggt gaagagcccc cagcaagttc gcctagggcc      960
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396 <211> LENGTH: 207
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412 Arg Gly Gln Gly Glu Lys Lys Asp Ser Cys Lys Leu Leu Leu Ser Thr
413 35 40 45
415 Ile Cys Leu Gly Glu Lys Ala Lys Glu Glu Val Asn Arg Val Glu Val
416 50 55 60
418 Leu Ser Gln Glu Gly Arg Lys Pro Pro Ile Thr Ile Ala Thr Leu Lys
419 65 70 75 80
421 Ala Ser Val Leu Pro Met Val Thr Val Ser Gly Ile Glu Leu Ser Pro
422 85 90 95
424 Pro Val Thr Phe Arg Leu Arg Thr Gly Ser Gly Pro Val Phe Leu Ser
425 100 105 110
427 Gly Leu Glu Cys Tyr Glu Thr Ser Asp Leu Thr Trp Glu Asp Asp Glu
428 115 120 125
430 Glu Glu Glu Glu Glu Glu Glu Glu Asp Glu Asp Glu Asp Ala Asp
431 130 135 140
433 Ile Ser Leu Glu Glu Ile Pro Val Lys Gln Val Lys Arg Val Ala Pro
434 145 150 155 160
436 Gln Lys Gln Met Ser Ile Ala Lys Lys Lys Lys Val Glu Lys Glu Glu
437 165 170 175
439 Asp Glu Thr Val Val Arg Pro Ser Pro Gln Asp Lys Ser Pro Trp Lys
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443 195 200 205
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447 <211> LENGTH: 214
449 <212> TYPE: DNA
451 <213> ORGANISM: Mus musculus

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VERIFICATION SUMMARY

DATE: 05/23/2001

PATENT APPLICATION: US/09/844,864

TIME: 13:11:59

Input Set : A:\Pto.amc

Output Set: C:\CRF3\05232001\I844864.raw

L:18 M:270 C: Current Application Number differs, Replaced Current Application Number